Claims

[c1]   We claim an iCord telehone system for making/ receiving voice phone calls is comprised of

a. an iCord base station with Internet, PSTN and cordless connectivity;

b. one or more iCord cradles with Internet connectivity and cordless connectivity;

c. one or more iCord cordless handsets with cordless or Internet (through LAN or WLAN) connectivity to the iCord base station directly or through cradles;

where the range of the iCord telephone system is extended globally over the Internet by implementing end-to-end secured Internet connectivity from the iCord handset to the iCord base station.

[c2]   The iCord telephone system of Claim [c1], wherein said base station comprises of

a. a controller for call control and media handling;

b. a memory coupled to the said controller for storing the code and data;

c. a PSTN module for handling all PSTN signaling and media;

d. a cordless module for handling wireless connec-

tions between handsets and the said base station;

e. a LAN module for handling Internet connections between handsets and the said base station.

f. an end-to-end secured Internet connection with each handset registers at the said base station.

[c3]   The iCord telephone system of Claim [c1], wherein said one embodiment of the cradle comprises of

a. a controller for mediation between LAN and cordless protocol stacks that facilitate the transport of the call control and media handling messages for voice phone calls;

b. a memory coupled to the said controller for storing the code and data;

c. a cordless module for handling wireless connections between the cradle and handsets;

d. a wired LAN module for handling Internet connection to one or more base stations.

[c4]   The iCord telephone system of Claim [c1], wherein said one embodiment of the handset comprises of

a. a controller for call control and for media processing and handling for voice phone calls;

b. a memory coupled to the said controller for storing the code and data;

c. a cordless module for handling wireless connection with the base station or the cradle;

d. an end-to-end secured Internet connection with each base station the handset registered with;

e. has a standard cordless handset form factor with a display unit to display information from the iCord base station and select stored phone numbers and other iCord phones registered with the same base station.

[c5]   The system of Claim [c4], wherein the said handset's cordless module is replaced by a LAN module with wired Internet connectivity with the base stations.

[c6]   The system of Claim [c4], wherein the said handset's cordless module is replace by a WLAN module with wireless Internet connectivity with the base stations.

[c7]   The iCord telephone system of Claim [c1] wherein each said base station can have more than one handsets of Claim [c4] registered with and communicate over the Internet globally, mediated by the said cradle of claim [c3].

[c8]   The iCord telephone system of Claim [c1] wherein each said base station can have more than one handsets of Claim [c5] registered with and communicate over the Internet globally.

[c9]   The iCord telephone system of Claim [c1] wherein each said base station can have more than one handsets of

Claim [c6] registered with and communicate over the Internet globally.

[c10] The system of Claim [c3] wherein a said cradle can cordlessly communicate with more than one handsets of Claim [c4], where each said handset connects to one or more base stations.

[c11] The system of Claim [c10] wherein a said cradle can impose limit on the said handsets to be allowed to connect to only a selected set of base stations.

[c12] The system of Claim [c2] wherein a said base station can incorporate the system of Claims [c10 and c11] to offer managed mediation service to one or more handsets of Claim [c4] to connect to other base stations through the said base station.

[c13] The system of Claims [c4, c5, c6] wherein the said handset can each registers and communicates with multiple base stations of Claim [c2].

[c14] The systems of Claim [c13] wherein a said handset lets its user select which base station to use for making outgoing phone call.

[c15] The systems of Claim [c13] where in a said handset notify its user which base station receives call alert about

an incoming phone call.

[c16]   The iCord telephone system of Claim [c1] where incoming calls to the base station alerts all associated handsets and allow any user to answer the phone.

[c17]   The iCord telephone system of Claim [c1] where the base station can be configured by the user to recognize caller origin and selectively alerts a subset of iCord phones.

[c18]   The iCord telephone system of Claim [c1] where an iCord handset user can make a phone call by selecting a name entered into the iCord base station by a user that corresponds to a PSTN number or another iCord phone.

[c19]   The iCord telephone system of Claim [c1] where the phone call from an iCord handset utilizes the PSTN interface at the base station to make a PSTN call.

[c20]   The iCord telephone system of Claim [c1] where the phone call from the handset is a VOIP call to another handset associated with a base station that the calling handset has registered with.

[c21]   The iCord telephone system of Claim [c1], where the user, during a call, can add a third party with a handset associated with a base station that the user's handset has registered with.

[c22]   The iCord telephone system of Claim [c1] where the iCord base station can have multiple PSTN interfaces allowing multiple simultaneous PSTN calls by different iCord handsets

[c23]   The iCord telephone system of Claim [c1] where each iCord base station implements end-user programmable station management policies that performs authentication and allows only authenticated and authorized users, handsets to establish the Internet/ cordless encrypted connections with the base station.